

WHAT IS CLAIMED IS:

1. A method of:
 - a) directing a mammalian immune response towards a Th2 type response, said
5 method comprising administering an IL-174 agonist to immune cells of the
mammal;
 - b) stimulating an mammalian innate immune response, said method comprising
administering an IL-174 agonist to immune cells of the mammal;
 - c) augmenting a mammalian inflammatory response from epithelial or fibroblast
10 cells, said method comprising further administering an IL-174 agonist to said
mammal;
 - d) inducing gut cell growth, said method comprising administering an IL-174
agonist to said cell;
 - e) promoting mammalian extra medulary hematopoiesis, said method comprising
15 administering an IL-174 agonist to said mammal;
 - f) directing a mammalian immune response away from a Th2 type response, said
method comprising administering an IL-174 antagonist to immune cells of
the mammal;
 - g) preventing mammalian inflammation or granuloma formation, comprising
20 administering an IL-174 antagonist to immune system cells; or
 - h) augmenting antibody response in serum and fecal material, said method
comprising administering an IL-174 agonist to immune cells of the mammal.
2. The method of Claim 1:
 - 25 a) directing a mammalian immune response towards a Th2 type response, said
method comprising administering an IL-174 agonist to immune cells of the
mammal;
 - b) stimulating an mammalian innate immune response, said method comprising
administering an IL-174 agonist to immune cells of the mammal;
 - 30 c) augmenting a mammalian inflammatory response from epithelial or fibroblast
cells, said method comprising further administering an IL-174 agonist to said
mammal;
 - d) inducing gut cell growth, said method comprising administering an IL-174
agonist to said cell; or
 - 35 e) promoting mammalian extra medulary hematopoiesis, said method comprising
administering an IL-174 agonist to said mammal.

3. The method of Claim 2:
- d) inducing gut cell growth, said method comprising administering an IL-174 agonist to said cell;
 - 5 e) promoting mammalian extra medulary hematopoiesis, said method comprising administering an IL-174 agonist to said mammal.
4. The method of Claim 1:
- 10 f) directing a mammalian immune response away from a Th2 type response, said method comprising administering an IL-174 antagonist to immune cells of the mammal;
 - g) preventing mammalian inflammation or granuloma formation, comprising administering an IL-174 antagonist to immune system cells; or
 - 15 h) augmenting antibody responses in serum and fecal material, said method comprising administering an IL-174 agonist to immune cells of the mammal.
5. The method of Claim 2 administering an agonist, wherein said administering:
- 20 a) induces cytokine production by a fibroblast, epithelial, or endothelial cell;
 - b) downregulates an inflammatory response which accompanies an infection;
 - c) stimulates growth of an epithelial cell; or
 - d) induces growth of gut epithelial, fibroblast, or goblet cells.
6. The method of Claim 2 administering an agonist, wherein said mammal exhibits, or has experienced conditions to stimulate:
- 25 a) an autoimmune condition;
 - b) an infectious disease immune response;
 - c) a wound healing response; or
 - d) a Th1 mediated condition.
7. The method of Claim 6, wherein:
- 30 a) said autoimmune condition is selected from:
 - i) multiple sclerosis;
 - ii) systemic lupus erythematosus;
 - 35 iii) rheumatoid arthritis;
 - iv) diabetes; or

- v) psoriasis;
 - b) said infectious response is symptomatic of:
 - i) an Aspergillis infection;
 - ii) a fungal infection, including Candidaisis, Blastomycosis, or Aspergillosis;
 - iii) a parasitic infection, including Schistosomiasis, fluke worm, Helminth, or Filariasis; or
 - iv) a viral infection, including hepatitis; or
 - c) said Th1 mediated condition is an inflammatory condition, including Crohn's disease, ulcerative colitis, pancreatitis, hepatitis, or eosinophilic gastritis.
8. The method of Claim 7 treating an infectious response, further comprising administering another therapeutic entity to treat said infection.
9. A method of Claim 2, stimulating an mammalian innate immune response.
10. The method of Claim 4 administering an antagonist, wherein said antagonist is a monoclonal antibody against IL-174.
11. The method of Claim 4 administering an antagonist, wherein:
- a) said administering blocks eosinophil attraction, tissue remodeling, or fibrosis; or
 - b) said mammal exhibits, or has experienced conditions to stimulate:
 - i) an allergic condition;
 - ii) an inflammatory condition; or
 - iii) a Th2 mediated condition.
12. The method of Claim 11, wherein:
- a) said eosinophils are attracted to the lung, liver or intestine
 - b) said fibrosis is pancreatic duct or peribiliary fibrosis;
 - c) said antagonist suppresses production of IL-4, IL-5, and/or IL-13;
 - d) said antagonist decreases eotaxin, CCR4, and/or CCR4 expression in BAL;
 - e) symptoms of said allergic condition are in the lung;
 - f) said allergic condition is a systemic anaphylactic response, skin hypersensitivity response, or a food allergy; or
 - g) said inflammatory or Th2 mediated condition is a dermatitis or asthmatic inflammation.

13. The method of Claim 11, wherein said mammal exhibits, or has experienced conditions to stimulate:

- 5 a) an allergic condition;
- b) an inflammatory condition; or
- c) a Th2 mediated condition.

14. A composition comprising:

- 10 a) an IL-174 agonist and:
 - i) an antimicrobial, including an antibiotic, antiviral, or antifungal compound; or
 - ii) a chemotherapy agent; or
- 15 b) an IL-174 antagonist and:
 - i) an allergy medicament;
 - ii) an asthma medicament;
 - iii) a dermatitis medicament;
 - iv) a fibrosis medicament; or
 - 20 v) an eosinophilic gastritis medicament.